Acronyms and Glossary

LIST OF ACRONYMS

ACCD Vermont Agency of Commerce and Community

Development

AHS Vermont Agency of Human Services
AMO Access Management Organizations
ANI Automatic Number Identification

ASL American Sign Language
ATM Asynchronous Transfer Mode

CAPI Consumer Affairs and Public Information Division, Vermont

Department of Public Service

CDBG Community Development Block Grants

CDPD Cellular Digital Packet Data
CDMA Code Division Multiple Access
CIO Chief Information Officer

CLEC Competitive Local Exchange Carrier

CPG Certificates of Public Good CPN Calling Party Number

CPNI Customer Proprietary Network Information
CVPS Central Vermont Public Service Corporation
DET Vermont Department of Employment and Training
DII Vermont Department of Information and Innovation
DOCSIS Data Over Cable Service Interface Specification

DOL Vermont Department of Libraries
DPS Vermont Department of Public Safety

DSL Digital Subscriber Line
DVR Digital Video Recorder
EAS Extended Area Service

EDA U.S. Department of Commerce Economic Development

Administration

ETC Eligible Telecommunications Carrier

FAHC Fletcher Allen Health Care

FASTSTAR Fletcher Allen Specialized Telemedicine for Supporting

Transfer and Rescue

FCC Federal Communications Commission

FTTH Fiber-To-The-Home FX Foreign Exchange

GIS Geographic Information Systems

GMP Green Mountain Power
GPRS General Packet Radio Service

GSM Global Standard for Mobile Communications

GSP Gross State Product

HDTV High-Definition Television

HIPAA Health Insurance Portability and Accountability Act

ILEC Incumbent Local Exchange Carrier ILN Interactive Learning Network

IM Instant Messaging
IP Internet Protocol

IRMAC Information Resource Management Advisory Council

IRU Indefeasible Right of Use

ISDN Integrated Services Digital Network

ISP Internet Service Provider IT Information Technology

ITC Independent Telephone Company

ITU International Telecommunications Union

LAN Local Area Network

LEC Local Exchange Carriers

LMS Local Measured Service

LNP Local Number Portability

MPLS Multi-Protocol Label Switching

NANPA North American Numbering Plan Administrator

NECA National Exchange Carrier Association NENA National Emergency Number Association

NPA Numbering Plan Area
ONU Optical Network Units

PATH Vermont Department of Prevention, Assistance, Transition,

and Health Access

PBX Private Branch Exchange

PCS Personal Communications Service
PEG Public, Educational, and Governmental

PON Passive Optical Network
PSAP Public Safety Answering Point
PSB Vermont Public Service Board
PSD Vermont Public Service Department
PSTN Public Switched Telephone Network

PVR Personal Video Recorder

RBOC Regional Bell Operating Company

RETN Regional Educational Television Network

RFI Request for Information RFP Request for Proposals

ROW Right-of-Way

RPC Regional Planning Commission

RPR Resilient Packet Rings

RRMC Rutland Regional Medical Center

RUS Rural Utilities Service

SBDC Small Business Development Center

SLC Subscriber Line Charge

TCP/IP Transmission Control Protocol / Internet Protocol

TDMA Time Division Multiple Access

TELRIC Total Element Long-Run Incremental Cost

TSAC Tower Siting Advisory Committee

TTY Text Telephone

UNE Unbundled Network Element
USF Universal Service Fund
UVM University of Vermont

VALS Vermont Automated Libraries System

VAN Vermont Access Network

VCRD Vermont Council on Rural Development

VDH Vermont Department of Health

VEDA Vermont Economic Development Authority

VI Vermont Institutes

VIBRS Vermont Incident Based Reporting System

VIT Vermont Interactive Television

VITC Vermont Information Technology Center
VMEC Vermont Manufacturing Extension Center

VOD Video on Demand

VoIP Voice over Internet Protocol

VON Voice on the Net

VPN Virtual Private Network

VTAC Vermont Telecommunications Advancement Center

VTrans Vermont Agency of Transportation

VTRS Vermont Telecommunications Relay Service

WAN Wide Area Network

WISP Wireless Internet Service Provider

GLOSSARY OF TERMS

Access charge A charge paid by long distance carriers

to local exchange providers for use of local facilities in routing long distance

calls.

Access line A circuit between a subscriber and the

central office that serves it.

Bit (Binary digit) The smallest unit of information a

computer can use. A bit is represented as a 0 or a 1 (also "on" or "off"). A group of 8 bits is " called a byte. Bits are often used to measure the speed of

digital transmission systems.

Alternative regulation A family of regulatory techniques

that relax traditional rate-of-return regulation in favor of regulation by objectives such as price, service quality, or introduction of services.

Asynchronous Transfer Mode (ATM) A type of fast packet data service that

is specially designed to predictably manage multiple types of data streams, including ones with strict quality-ofservice requirements like video and

voice.

Broadband A family of services that provide users

with high-speed data communications. In some contexts, broadband is defined as services with an ability to transmit data at greater than specific rates measured in kbps or Mbps.

Byte Eight bits of information composed

of zeros or ones, one of which may include a parity bit. A byte is to a bit

what a word is to a character.

Cable modem A device for transmitting and receiving

digital data over a cable television network. Used to deliver broadband (and sometimes telephone) service

over cable networks.

Code Division Multiple Access

(CDMA)

One of several digital mobile wireless

telephone and data standards used in

the U.S.

Central office The telephone company facilities that

house switching and related equipment to serve the immediate geographical area. The central office is the most immediate point of interface between the telephone company and customers.

Certificate of public good (CPG) The permission required from and

granted by the State of Vermont to allow a utility or regulated industry, such as a cable company, to do business and serve subscribers in

Vermont.

Competitive Local Exchange Carrier

(CLEC)

A non-incumbent LEC. See also Local

Exchange Carrier, Incumbent Local

Exchange Carrier.

Customer proprietary network

information (CPNI)

Information about a customer's calling patterns and other personal

information that technologies now enable telephone companies to collect.

Dial tone line rate The basic monthly charge under

measured service for access to the telephone network. A charge related to

usage is charged as well.

Digital signature A form of encryption technology

that can be used to scramble a message before transmission so as to secure it during transit and prevent anyone but the intended recipient from unscrambling it to retrieve the "information in the message. Additionally, the use of digital signatures enables " the sender's identity to be verified by the recipient.

Digital Subscriber Line (DSL)

A family of technologies that extends

the ability of copper telephone lines to carry high-speed data telecommunications over short and

medium range distances.

Digital Video Recorder (DVR) See Personal Video Recorder.

Distance learning Interactive instruction or training

> services conducted among remote participants from distributed sites. Audio, visual, data

telecommunications devices and related systems are employed. There are many distance learning models; traditional lecture format, remote students with a teacher at a central location, and cooperative learning arrangements involving multiple connections of small groups from

various locations.

DS-1 A type of digital service transmitting

> voice or data at 1.544 Mbps. Sometimes used as a synonym for a T-1 (see also T-1, below). Where distinguished from one another, a DS-1 generally refers to the service, while T-1 refers to the facility carrying the

service.

Eligible Telecommunications Carrier

(ETC)

A telecommunications carrier that qualifies and has been designated to receive high-cost support from the Federal Universal Service Fund.

Ethernet The dominant computer networking protocol for Local Area Networks

that is often used in the networks of telecommunications carriers.

Exchange A geographical unit, served by one or

> more central offices, established for the administration of uniform rates for communications service within that area. Vermont is currently served by

141 exchanges.

Federal Communications A board of five commissioners Commission (FCC)

appointed by the President and

confirmed by the Senate in accordance with the 1934 Communications Act. The FCC has the power to regulate interstate and foreign communications originating in the United States by

wire and radio.

Fiber optics Hair-thin glass fibers that transmit light

waves capable of carrying enormous

amounts of information.

Franchise area The geographic region in which the

PSB or FCC has granted a public service company the authority to offer

specific types of service.

Gigabit One billion bits.

General Packet Radio Service (GPRS) A mobile wireless communications

protocol related to GSM used to provide mobile data services.

Global Standard for Mobile One of several digital mobile wireless

Communications (GSM) telephone standards used in the U.S.

and the dominant standard throughout Europe and much of the world.

Head end The originating point of a signal in

cable TV systems.

Incumbent Local Exchange Carrier

(ILEC)

A local telephone company that was in operation prior to the advent of

competition for telephone service, or a successor to such a company.

Independent phone company

In Vermont, an ILEC other than

Verizon.

kbps Kilobits per second, a unit of data

transfer speed.

Kilobit One thousand binary digits or bits.

Local area network (LAN) A private communications network linking terminals and computers in

a specific area, such as an office or

home.

Local exchange carrier (LEC) A telecommunications company

that provides local telephone or data telecommunications service; distinguished from long-distance or interexchange carriers by the fact that they provide the links to consumers at

their homes or businesses.

Local loop The part of the telephone network, i.e.,

the wires, between a central office and

a customer's premise.

Local measured service (LMS)

Local service for which a customer

pays a flat dial tone line rate for access to the telephone network, plus a usage charge for each minute of local calling.

Locality A border area of Vermont that is

serviced by a telephone central office

in another state.

Mbps Megabits per second, a unit of data

transfer speed.

Megabit One million binary digits or bits.

Megabyte A unit of measurement for data storage

> equal to one million bytes or precisely 1,048,576 bytes; often used as a unit of measurement in describing memory capacity of computer disks and drives.

In communications, an atmospheric

transmission method using high radio frequencies to transmit analog or digital voice, data, or video signals between antennas or on satellite links.

Personal Communications Service

A digital cellular technology providing voice, video, and data services. Uses a

higher frequency band than traditional cellular services, limiting the range of signals, but which offers greater

bandwidth than the traditional cellular

bands.

Personal Video Recorder (PVR) A device for recording television on a

> hard drive, integrated with electronic program guides. Allows users to skip forward or reverse instantly, manage and access recorded programs more readily than when using videotapes, and view a recorded program while

recording another program.

Plain old telephone service (POTS) A term used to identify basic voice

phone service.

Public Switched Telephone Network A term used to denote the

(PSTN)

Microwave

(PCS)

interconnected networks of many

carriers that collectively to provide telephone services to the public. Sometimes used as a term to

distinguish these networks from other networks, such as the Internet or private communications networks.

Private branch exchange (PBX) A private switching system on the

customer's premises, which switches calls between phones in the office and

to or from the outside phone network.

Public, education, and government The 1984 Cable Act established (PEG) access channels

that access to local cable television franchises are provided to communities

who want them. Public, education, and government are three types of

"public access" channels.

Public safety answering point (PSAP) Local, state, or regional center for

answering 9-1-1 calls. It may or may

not be the dispatch center.

Regional Bell Operating Company

(RBOC)

T-1

Seven RBOCs were created by the breakup of the Bell System (AT&T) in 1984. These were Bell Atlantic, Bell South, NYNEX, Ameritech, USWest, Pacific Tellsis, and Southwestern Bell. After a series of mergers and

acquisitions, four remain: Verizon, SBC, Qwest, and Bell South.

A type of digital carrier system

transmitting voice or data at 1.544

Mbps.

Tariff The published rates, regulations, and

descriptions governing provision of a regulated public service such as telecommunications services.

Telecommuting Using a computer, modem, and

telephone system to connect with a computer system at the workplace and performing tasks that are typically done at the workplace from home or

another remote location.

Telework Sometimes used as a synonym for

"telecommuting," and sometimes used as a broader term to encompass telecommuting plus other situations where telecommunications enables work to be done at a distance, whether

or not it displaces a traditional

commute.

Terrabit One trillion bits.

Unbundled Network Element (UNE) A particular piece of an ILEC's

network (such as the local loop, switching, or transport facilities between central offices) sold at wholesale rates to a CLEC.

Pronounced "yoo-nee."

Unbundling Separating out for individual sale

a particular service or element of a network that is commonly sold together with other elements or

services.

Video on Demand (VOD) A cable TV service that allows a

cable subscriber to select a program and have it delivered over the cable network at a time of the subscriber's choosing. Typically the service also allows the subscriber to fast forward, rewind, and pause the program.

Virtual Private Network (VPN) Emulation of dedicated private data

circuits over a shared data network,

often over the Internet.

Voice over Internet Protocol (VoIP) Transporting digitized voice

communication over private networks that use Internet Protocol or over the public Internet. Frequently, but not always, the service provides telephone or telephone-like communication, and may enable communication with users

on the PSTN.

Wi-Fi The popular name for an industry

standard used for providing wireless local area networks (LANs) over license-free wireless spectrum.